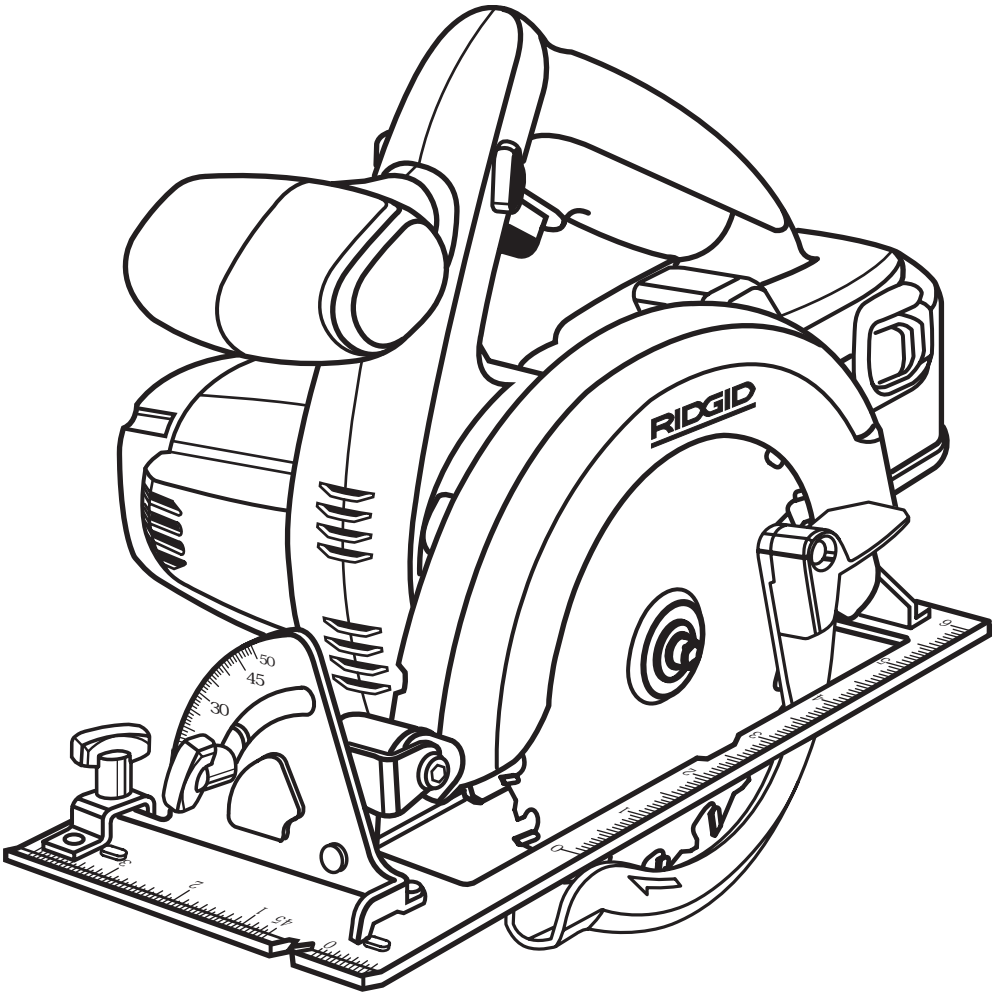
OPERATOR'S MANUAL

6-1/2 IN. 18 VOLT CIRCULAR SAW

R845



Your circular saw has been engineered and manufactured to our high standards for dependability, ease of operation, and operator safety. When properly cared for, the saw will give you years of rugged, trouble-free performance.

⚠ WARNING:
To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

Thank you for buying a RIDGID product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

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INTRODUCTION

This 18 Volt Circular Saw has many features for making its use more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

GENERAL SAFETY RULES

⚠ WARNING!
READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery.** A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- **Use battery operated tool only with specifically designated battery pack.** Use of any other batteries may create a risk of fire.
- **Use battery only with charger listed.**

MODEL	BATTERY PACK	CHARGER
R845	130254003, 130252004	140276002

- **Do not abuse the cord. Never use the cord to carry the charger. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately.** Damaged cords may create a fire.

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack.** Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enable better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Do not wear loose clothing or jewelry. Contain long hair.** Loose clothes, jewelry, or long hair can be drawn into air vents.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface enables better control of the tool in unexpected situations.

TOOL USE AND CARE

- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **Do not use tool if switch does not turn it on or off.** A tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause sparks, burns, or a fire.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may create a risk of injury when used on another tool.
- **Keep the tool and its handle dry, clean and free from oil and grease.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any strong solvents to clean your tool. Following this rule will reduce the risk of loss of control and deterioration of the enclosure plastic.

GENERAL SAFETY RULES

SERVICE

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES

- **DANGER! Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- **Keep your body positioned to either side of the saw blade, but not in line with the saw blade.** KICKBACK could cause the saw to jump backwards. (see KICKBACK)
- **Do not reach underneath the work.** The guard cannot protect you from the blade below the work.
- **Check the lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation and condition of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris.
- **Lower guard should be retracted manually only for special cuts such as "Pocket Cuts" and "Compound Cuts." Raise lower guard by Retracting Handle. As soon as blade enters the material, lower guard must be released.** For all other sawing, the lower guard should operate automatically.
- **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.
- **NEVER hold piece being cut in your hands or across your leg.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring.** Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- **When ripping always use a rip fence for a straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- **Always use blades with correct size and shape (diamond vs. round) arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- **Never use damaged or incorrect blade washers or bolts.** The blade washers and bolt were specially designed for the saw, for optimum performance and safety of operation.

CAUSES AND OPERATOR PREVENTION OF KICKBACK:

Kickback is a sudden reaction to a pinched, bound, or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.

When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.

If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is a result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- **Maintain a firm grip on the saw and position your body and arm in a way that allows you to resist KICKBACK forces.** KICKBACK forces can be controlled by the operator, if proper precautions are taken.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or KICKBACK may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- **When restarting a saw in the workpiece, center the saw blade in the kerf and check that teeth are not engaged into the material.** If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.

SPECIFIC SAFETY RULES

- **Support large panels to minimize the risk of blade pinching and KICKBACK.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- **Do not use dull or damaged blade.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding, and KICKBACK.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it will cause binding and KICKBACK.
- **Use extra caution when making a "Pocket Cut" into existing walls or other blind areas.** The protruding blade may cut objects that can cause KICKBACK.

ADDITIONAL SAFETY RULES

- **Know your power tool. Read operator's manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this tool.** Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Always wear safety glasses with side shields.** Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury.
- **Protect your lungs. Wear a face or dust mask if the operation is dusty.** Following this rule will reduce the risk of serious personal injury.
- **Protect your hearing. Wear hearing protection during extended periods of operation.** Following this rule will reduce the risk of serious personal injury.
- **Inspect tool cords periodically and, if damaged, have repaired at your nearest Authorized Service Center. Constantly stay aware of cord location.** Following this rule will reduce the risk of electric shock or fire.
- **Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center.** Following this rule will reduce the risk of shock, fire, or serious injury.
- **Inspect for and remove all nails from lumber before using this tool.** Following this rule will reduce the risk of serious personal injury.
- **Drugs, alcohol, medication. Do not operate tool while under the influence of drugs, alcohol, or any medication.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.
- **Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not place battery tools or their batteries near fire or heat.** This will reduce the risk of explosion and possibly injury.
- **WARNING:** Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- **Do not charge battery tool in a damp or wet location.** Following this rule will reduce the risk of electric shock.
- **For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F. Do not store outside or in vehicles.**
- **Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.** Following this rule will reduce the risk of serious personal injury.

SAFETY RULES FOR CHARGER

WARNING!
READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

- **Before using battery charger,** read all instructions and cautionary markings in this manual, on battery charger, battery, and product using battery to prevent misuse of the products and possible injury or damage.

CAUTION:
To reduce the risk of electric shock or damage to the charger and battery, charge only nickel-cadmium rechargeable batteries as specifically designated on your charger. Other types of batteries may burst, causing personal injury or damage.

- **Do not use charger outdoors or expose to wet or damp conditions.** Water entering charger will increase the risk of electric shock.
- **Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not abuse cord or charger.** Never use the cord to carry the charger. Do not pull the charger cord rather than the plug when disconnecting from receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.
- **Make sure cord is located so that it will not be stepped on, tripped over, come in contact with sharp edges or moving parts or otherwise subjected to damage or stress.** This will reduce the risk of accidental falls, which could cause injury, and damage to the cord, which could result in electric shock.
- **Keep cord and charger from heat to prevent damage to housing or internal parts.**
- **Do not let gasoline, oils, petroleum-based products, etc. come in contact with plastic parts.** They contain chemicals that can damage, weaken, or destroy plastic.
- **An extension cord should not be used unless absolutely necessary.** Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
  a. That pins on plug of extension cord are the same number, size and shape as those of plug on charger.
  b. That extension cord is properly wired and in good electrical condition; and
  c. That wire size is large enough for AC ampere rating of charger as specified below:

Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

  NOTE: AWG = American Wire Gauge
- **Do not operate charger with a damaged cord or plug,** which could cause shorting and electric shock. If damaged, have the charger replaced by an authorized serviceman.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.** Take it to an authorized serviceman for electrical check to determine if the charger is in good working order.
- **Do not disassemble charger.** Take it to an authorized serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- **Unplug charger from outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.**
- **Disconnect charger from the power supply when not in use.** This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It also will help prevent damage to the charger during a power surge.
- **Risk of electric shock.** Do not touch uninsulated portion of output connector or uninsulated battery terminal.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also to prevent misuse of the product and possible injury.

WARNING:
Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SYMBOLS

Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
⎓	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
⧈	Class II Construction	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.

SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
⚠	**DANGER:**	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
⚠	**WARNING:**	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
⚠	**CAUTION:**	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION:	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

⚠ WARNING:

To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. Save this operator's manual and review frequently for continuing safe operation and instructing others who may use this product.

⚠ WARNING:

The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

SAVE THESE INSTRUCTIONS

FEATURES

PRODUCT SPECIFICATIONS

Blade Diameter	6-1/2 in.
Blade Arbor	5/8 in.
Cutting Depth at 0°	2-1/8 in.
Cutting Depth at 45°	1-5/8 in.
No Load Speed	2,500/min.
Motor	18 Volt DC
Charger Input	120 V, 60 Hz, AC only
Charge Rate	30 minutes

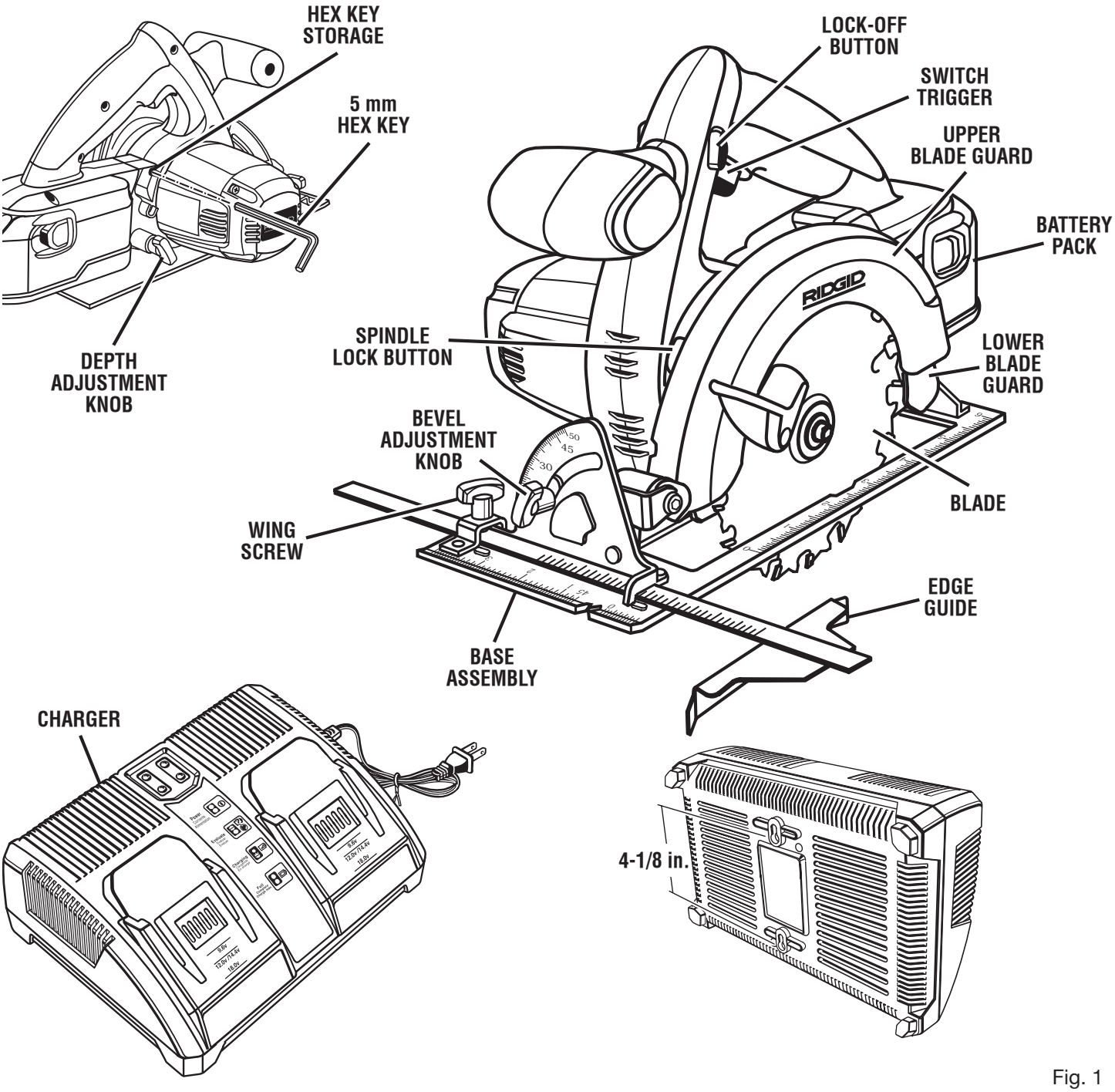


Fig. 1

FEATURES

KNOW YOUR CIRCULAR SAW
See Figure 1.
Before attempting to use this product, familiarize yourself with all operating features and safety rules.

SWITCH TRIGGER
The switch trigger is located on the handle of the circular saw.

LOCK-OFF BUTTON
The saw is equipped with a lock-off button which reduces the possibility of accidental starting. The lock-off button is located on the handle above the switch trigger. You must depress the lock-off button in order to pull the switch trigger. The lock resets each time the trigger is released.

NOTE: You can depress the lock-off button from either the left or right side.

DEPTH ADJUSTMENT KNOB
Sets the depth of the blade for the most efficient cutting action.

SPINDLE LOCK
The spindle lock allows you to secure the blade when turning the blade screw.

NOTE: Do not run circular saw with the spindle lock engaged.

EDGE GUIDE
The edge guide helps the operator make long or wide rip cuts.

BLADE WRENCH STORAGE
Convenient wrench storage for quick blade changes.

BEVEL ADJUSTMENT KNOB
The bevel adjustment feature allows you to make bevel cuts of 45° and 90°.

CHARGER
The charger has a “key hole” hanging feature for convenient, space saving storage. Screws should be installed so that the center distance is 4-1/8 in.

ASSEMBLY

UNPACKING
This product requires assembly.

- Carefully remove the tool and any accessories from the box.
- Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-866-539-1710 for assistance.

PACKING LIST
6-1/2 in. Circular Saw

Charger

Battery Pack

Saw Blade

Hex Key

Edge Guide

Tool Bag

Operator’s Manual

WARNING:
If any parts are missing do not operate this tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

WARNING:
Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

WARNING:
To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling parts.

ASSEMBLY

ATTACHING THE BLADE

See Figure 2.

WARNING:
A 6-1/2 in. blade is the maximum blade capacity of the saw. Never use a blade that is too thick to allow outer blade washer to engage with the flats on the spindle. Larger blades will come in contact with the blade guard, while thicker blades will prevent blade screw from securing blade on spindle. Either of these situations could result in a serious accident.

- Remove the battery pack from the saw.
- Remove the hex key from the storage area.
- Depress the spindle lock button and remove the blade screw and outer blade washer.

NOTE: Turn the blade screw clockwise to remove.

CAUTION:
To prevent damage to the spindle or spindle lock, always allow motor to come to a complete stop before engaging spindle lock.

- Wipe a drop of oil onto the inner blade washer and outer blade washer where they contact the blade.

WARNING:
If inner blade washer has been removed, replace it before placing blade on spindle. Failure to do so could cause an accident since blade will not tighten properly.

- Fit the saw blade inside the lower blade guard and onto the spindle.

  NOTE: The saw teeth point upward at the front of the saw.
- Replace the outer blade washer.
- Depress the spindle lock button, then replace the blade screw. Tighten the blade screw securely.

  NOTE: Turn the blade screw counterclockwise to tighten.
- Return hex key to storage area.

NOTE: Never use a blade that is too thick to allow the outer blade washer to engage with the flats on the spindle.

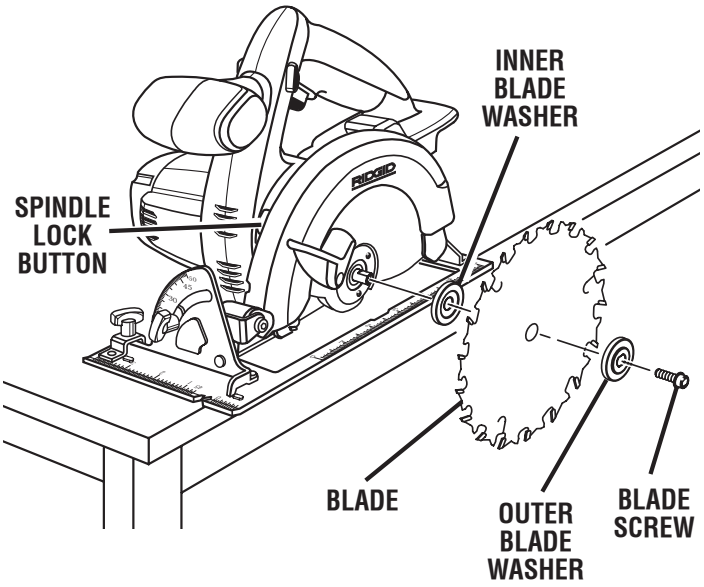


Fig. 2

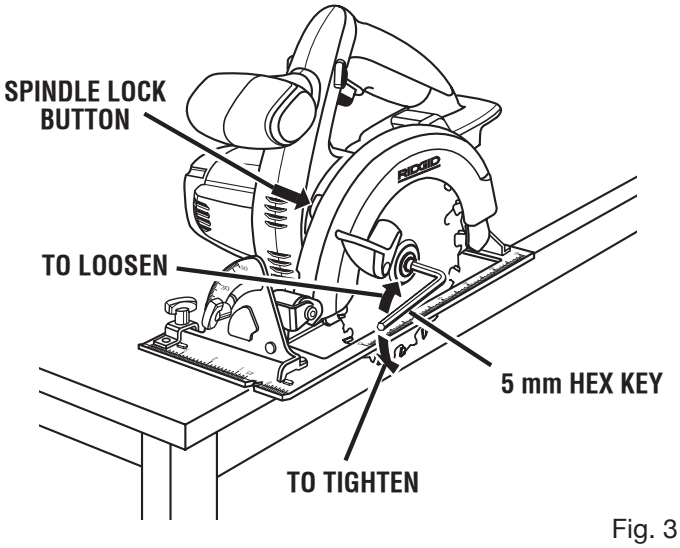


Fig. 3

REMOVING THE BLADE

See Figure 3.

- Remove the battery pack from saw.
- Remove the hex key from the storage area.
- Position the saw as shown, depress the spindle lock button, and remove the blade screw.

  NOTE: Turn blade screw clockwise to remove.
- Remove the outer blade washer.
- Remove the blade.

OPERATION

WARNING:
Do not allow familiarity with your tool to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

WARNING:
Always wear safety goggles or safety glasses with side shields when operating tools. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

WARNING:
Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

APPLICATIONS

You may use this tool for the purposes listed below:

- Cutting all types of wood products (lumber, plywood, paneling)
- Cross Cutting/Rip Cutting
- Bevel Cutting
- Pocket Cutting

CAUTION:
To prevent damage to the battery pack, remove the battery pack from the charger immediately if no LED comes on. Return the battery pack and charger to your nearest service center for checking or replacing. Also, if you are removing the battery pack from the charger and no LEDs are on, return both the battery pack and the charger to your nearest service center. Do not insert another battery pack into the charger. A damaged charger may damage a battery pack.

CHARGING THE BATTERY PACK

The battery pack for this tool has been shipped in a low charge condition to prevent possible problems. Therefore, you should charge it until the light on front of charger changes from flashing green to continuous green.

NOTE: Batteries will not reach full charge the first time they are charged. Allow several cycles (operation followed by recharging) for them to become fully charged. This is normal for nickel-cadmium batteries.

TO CHARGE

See Figure 4.

- Charge the battery pack only with the charger provided.
- **Make sure the power supply is normal house voltage, 120 volts, 60 Hz, AC only.**

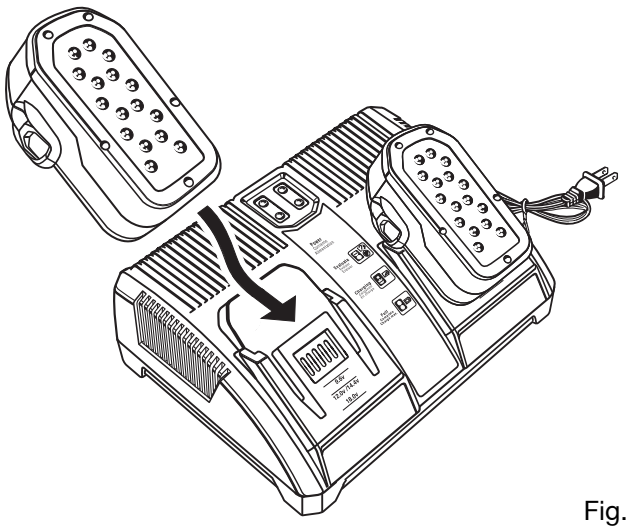


Fig. 4

- Connect the charger to a power supply.
- Attach the battery pack to the charger by aligning the raised ribs on the battery pack with the grooves in the charger, then slide the battery pack onto the charger.
- After normal usage, 30 minutes of charging time is required to be fully charged.
- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- Do not place the charger in an area of extreme heat or cold. It will work best at normal room temperature.
- When the batteries become fully charged, unplug the charger from the power supply and remove the battery pack.

IMPORTANT INFORMATION FOR RECHARGING A HOT BATTERY PACK

When using the tool continuously, the batteries in the battery pack will become hot. You should let a hot battery pack cool down for approximately 30 minutes before attempting to recharge. When the battery pack becomes discharged and is hot, the green LED will be off and the red LED will begin flashing.

When the battery pack cools down to approximately 104°F (40°C), the charger will automatically begin fast charge mode.

If the Red LED continues to flash for more than 90 minutes, and the green LED remains off, this may indicate a damaged battery that will not charge.

IMPORTANT INFORMATION FOR RECHARGING A COOL BATTERY PACK

If the battery pack is below normal temperature range, the red LED will begin flashing and the green LED will be off. When the battery warms to a temperature of more than 41°F (5°C), the charger will automatically begin fast charge mode.

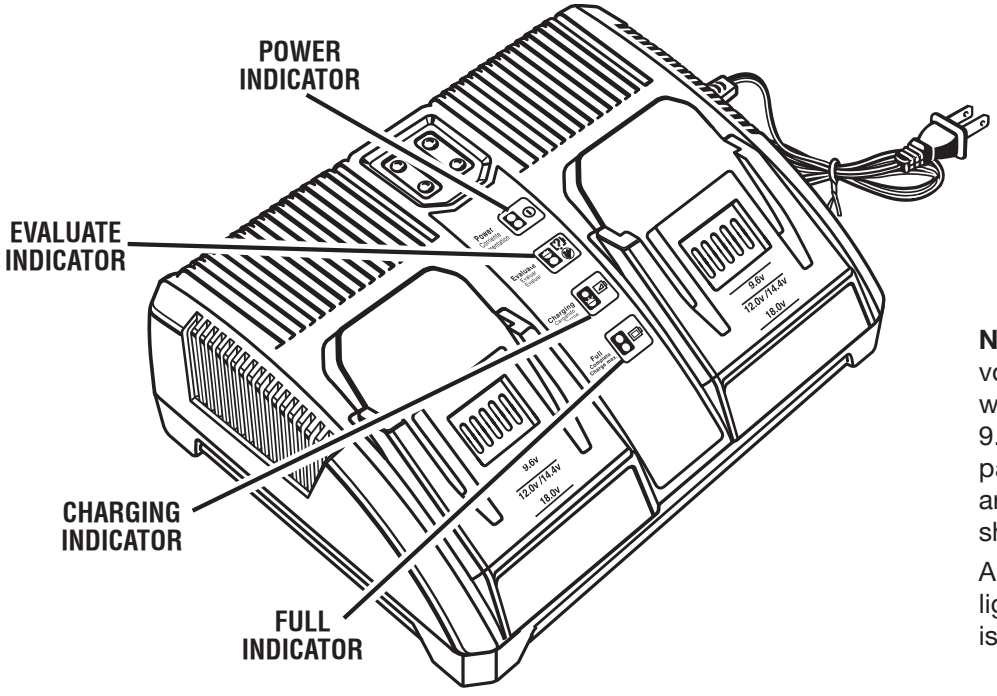
NOTE: Refer to **"CHARGING THE BATTERY PACK"** for normal recharging of batteries. If the charger does not charge your battery pack under normal circumstances, return both the battery pack and charger to your nearest repair center for electrical check. For the location of your nearest repair center, please call 1-866-539-1710.

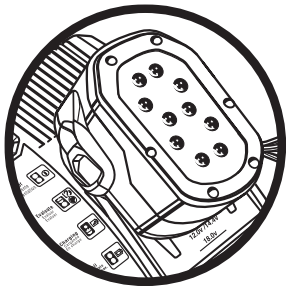
OPERATION

LED FUNCTION OF CHARGER

See Figure 5.

LED INDICATOR		BATTERY PACK	RED LED	GREEN LED	ACTION
Power Corriente Alimentation	Power	Without battery pack	ON	OFF	Ready to charge battery pack
Evaluate Evaluar Evaluer	Evaluate	Hot battery pack	Flashing	OFF	When battery pack reaches cooled temperature, charger begins fast charge mode
	Evaluate	Cold battery pack	Flashing	OFF	When battery pack reaches warmed temperature, charger begins fast charge mode
	Evaluate	Deeply discharged	Flashing	OFF	Charger pre-charges battery until normal voltage is reached, then begins fast charge mode
	Evaluate	Thermistor shorted or open	Flashing	OFF	If red LED continues flashing for more than 90 minutes, and green LED remains off, this may indicate a damaged battery
Charging Cargando En charge	Charging	Fast charging	ON	Flashing	Fast charges in 30 minutes
Full Completo Charge max.	Full	Slow charging	OFF	ON	Fast charging is complete. Charger maintains charge mode.





NOTE: The 9.6 volt, 12 volt, and 14.4 volt battery packs will not slide all the way down onto the charger port. Insert 9.6 volt, 12 volt, and 14.4 volt battery packs until they click into place and are aligned with the line on the charger, shown at left.

Allow up to 5 seconds for the “charge” light to come on after the battery pack is inserted.

Fig. 5

OPERATION

TO INSTALL BATTERY PACK

See Figure 6.

- Place the battery pack in the saw. Align the raised rib inside the saw with the groove on the battery pack.
- Make sure the latches on each side of the battery pack snap in place and the battery pack is secured in the saw before beginning operation.

CAUTION:

When placing battery pack in the tool, be sure raised rib on battery pack aligns with the bottom of the drill and latches into place properly. Improper installation of the battery pack can cause damage to internal components.

TO REMOVE BATTERY PACK

See Figure 6.

- Locate latches on the side of the battery pack and depress to release the battery pack from the saw.
- Remove the battery pack from the saw.

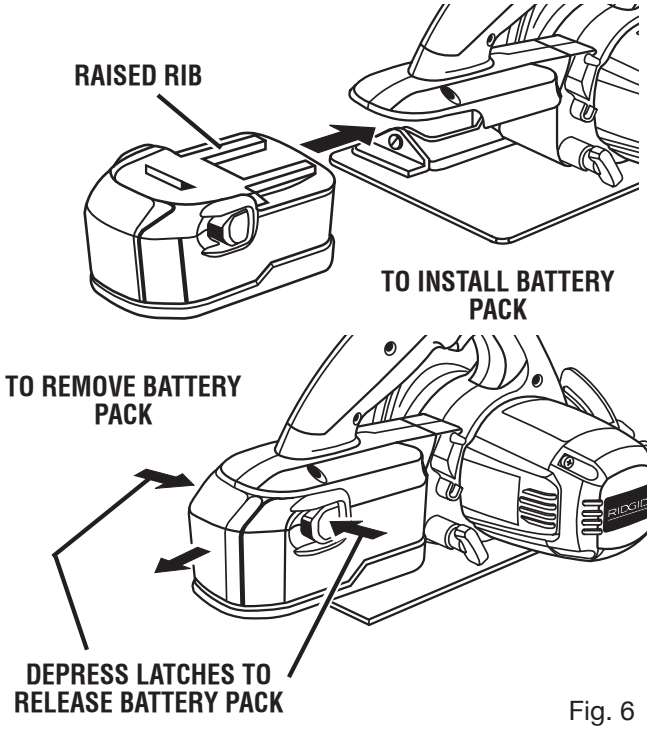


Fig. 6

SAW BLADES

The best of saw blades will not cut efficiently if they are not kept clean, sharp, and properly set. Using a dull blade will place a heavy load on the saw and increase the danger of kickback. Keep extra blades on hand, so that sharp blades are always available.

Gum and wood pitch hardened on blades will slow the saw down. Use gum and pitch remover, hot water, or kerosene to remove these accumulations. DO NOT USE GASOLINE.

BLADE GUARD SYSTEM

See Figure 7.

The lower blade guard attached to your cordless circular saw is there for your protection and safety. It should never be altered for any reason. If it becomes damaged or begins to return slow or sluggish, do not operate the saw until the damage has been repaired or replaced. Always leave guard in operating position when using saw.

⚠ DANGER:

When sawing through workpiece, lower blade guard does not cover blade on the underside of workpiece. Since blade is exposed on underside of workpiece, keep hands and fingers away from cutting area. Any part of your body coming in contact with moving blade will result in serious injury.

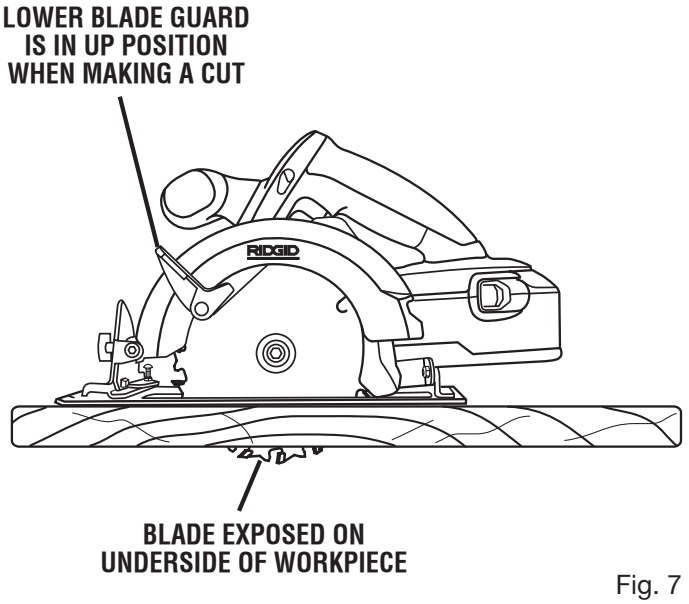


Fig. 7

CAUTION:

Never use saw when guard is not operating correctly. Check the guard for correct operation before each use. The guard is operating correctly when it moves freely and readily returns to the closed position. If you drop the saw, check the lower blade guard and bumper for damage at all depth settings before reuse.

OPERATION

KICKBACK

See Figures 8 - 11.

Kickback occurs when the blade stalls rapidly and the saw is driven back towards you. Blade stalling is caused by any action which pinches the blade in the wood.

WARNING:
To avoid kickback, release switch immediately if blade binds or saw stalls. Kickback could cause you to lose control of the saw. Loss of control can lead to serious injury.

To guard against kickback, avoid dangerous practices such as the following.

- Setting blade depth incorrectly
- Sawing into knots or nails in workpiece
- Twisting the blade while making a cut
- Making a cut with a dull, gummed up, or improperly set blade
- Supporting the workpiece incorrectly
- Forcing a cut
- Cutting warped or wet lumber
- Operating the tool incorrectly or misusing the tool

To lessen the chance of kickback, follow these safety practices.

- Keep the blade at the correct depth setting. The depth setting should not exceed 1/4 in. below the material being cut.
- Inspect the workpiece for knots or nails before cutting. Never saw into a knot or nail.
- Make straight cuts. Always use a straight edge guide when rip cutting. This helps prevent twisting the blade.
- Use clean, sharp, and properly set blades. Never make cuts with dull blades.
- Support the workpiece properly before beginning a cut.
- Use steady, even pressure when making a cut. Never force a cut.
- Do not cut warped or wet lumber.
- Hold the saw firmly with both hands and keep your body in a balanced position so as to resist the forces if kickback should occur.

WARNING:
When using the saw, always stay alert and exercise control. Do not remove the saw from the workpiece while the blade is moving.

KICKBACK - BLADE SET TOO DEEP

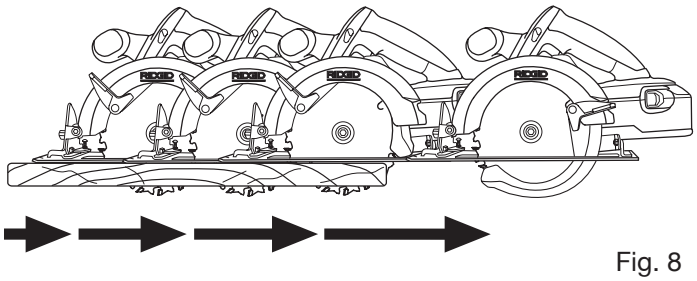


Fig. 8

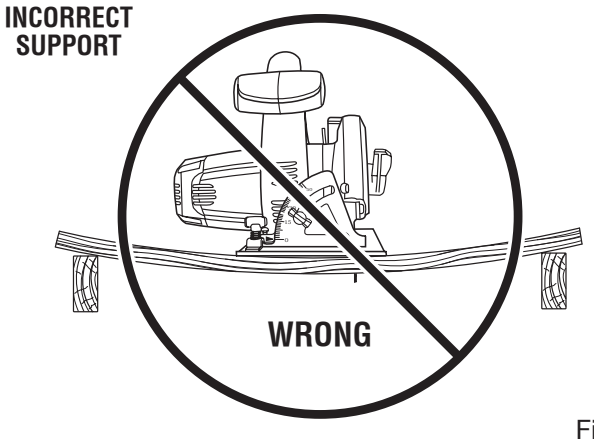


Fig. 9

CORRECT BLADE DEPTH SETTING = BLADE EXPOSED 1/4 in. (6.35 mm) OR LESS ON UNDERSIDE OF WORKPIECE

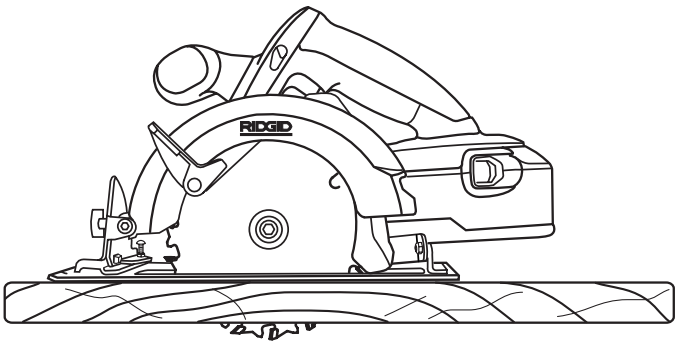


Fig. 10

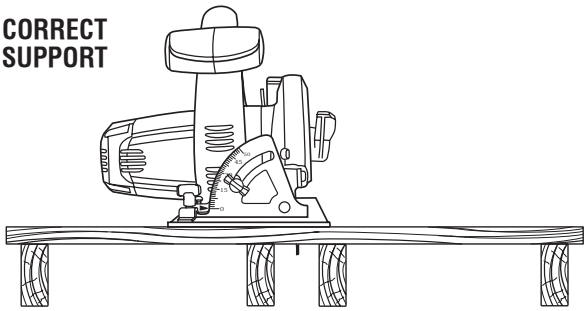


Fig. 11

OPERATION

LOCK-OFF BUTTON

See Figure 12.

The lock-off button reduces the possibility of accidental starting. The lock-off button is located on the handle above the switch trigger. The lock-off button must be depressed before you pull the switch trigger. The lock resets each time the trigger is released.

NOTE: You can depress the lock-off button from either the left or right side.

STARTING/STOPPING THE SAW

See Figure 12.

To start the saw:

- Depress the lock-off button.
- Depress the switch trigger.

Always let the blade reach full speed, then guide the saw into the workpiece.

WARNING:
The blade coming in contact with the workpiece before it reaches full speed could cause the saw to "kickback" towards you resulting in serious injury.

To stop the saw: Release the switch trigger.

After you release the switch trigger, allow the blade to come to a complete stop. **Do not remove the saw from the workpiece while the blade is moving.**

DEPTH OF CUT ADJUSTMENT

See Figure 13.

Always keep correct blade depth setting. The correct blade depth setting for all cuts should not exceed 1/4 in. below the material to be cut. More blade depth will increase the chance of kickback and cause the cut to be rough. One blade tooth below the material to be cut works best for most efficient cutting action.

TO ADJUST BLADE DEPTH

- Remove battery pack from saw.
- Loosen depth adjustment knob.
- Hold base flat against the workpiece and raise or lower saw until the required depth is reached.
- Tighten depth adjustment knob securely.

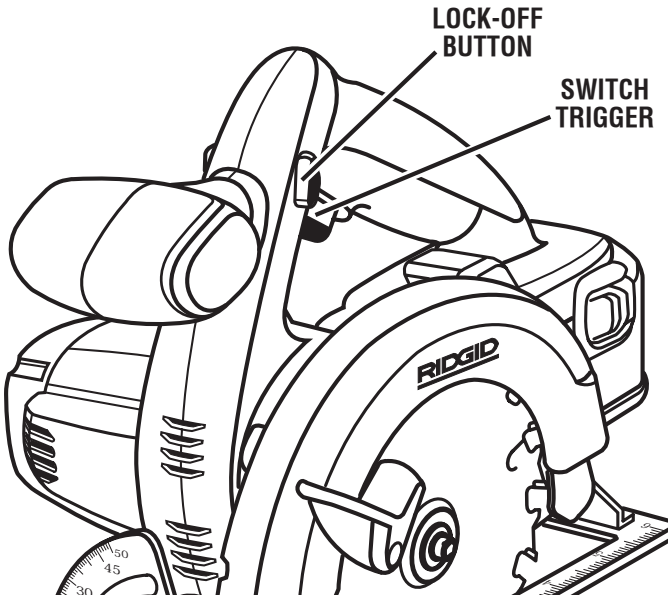


Fig. 12

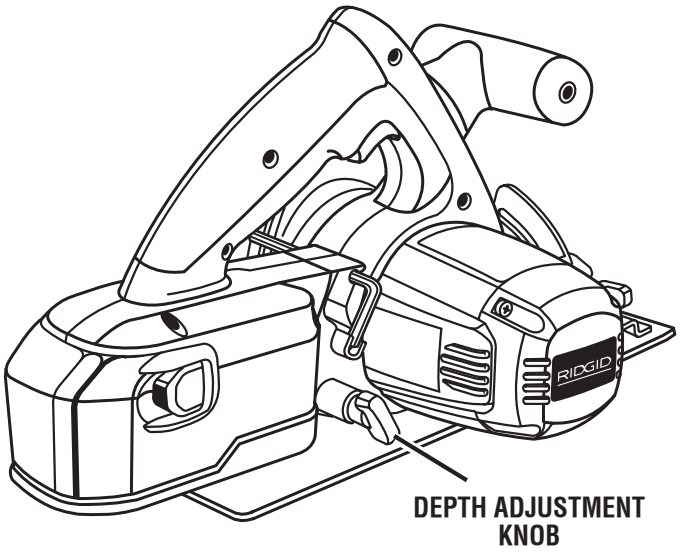


Fig. 13

OPERATION

OPERATING THE SAW

See Figures 14 - 15.

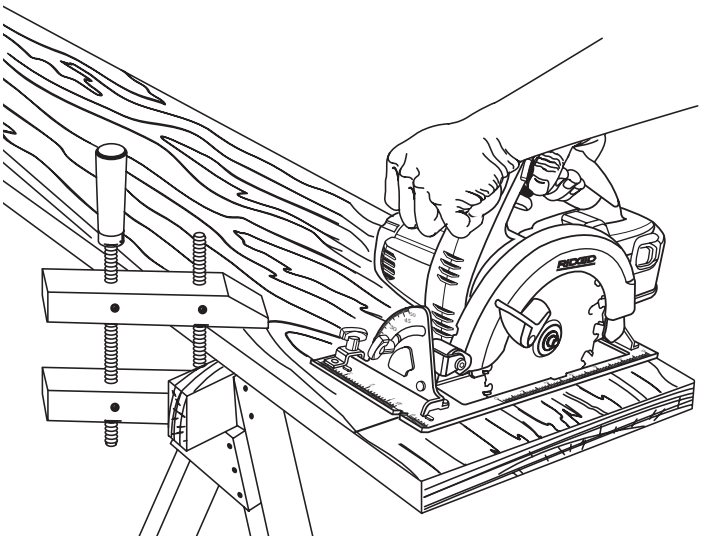
It is important to understand the correct method for operating the saw. Refer to the figures in this section to learn the correct and incorrect ways for handling the saw.

WARNING:
To make sawing easier and safer, always maintain proper control of the saw. Loss of control could cause an accident resulting in possible serious injury.

DANGER:
When lifting the saw from the workpiece, the blade is exposed on the underside of the saw until the lower blade guard closes. Make sure the lower blade guard is closed before setting the saw down.

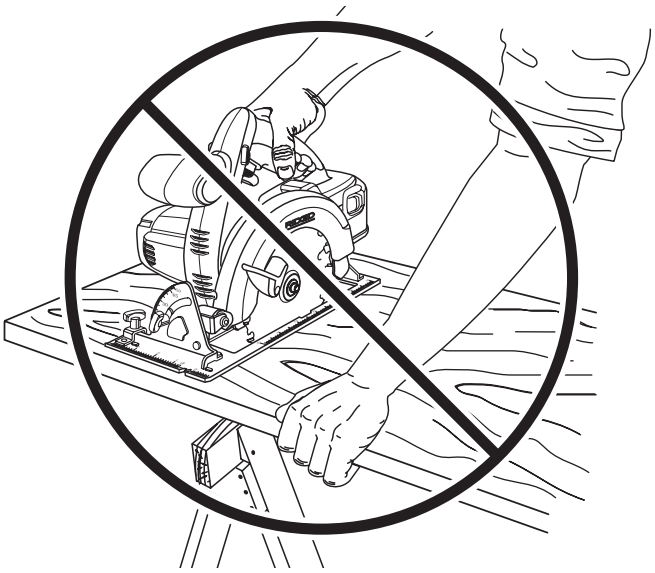
To make the best possible cut, follow these helpful hints.

- Hold the saw firmly with both hands.
- Avoid placing your hand on the workpiece while making a cut.
- Support the workpiece so that the cut (kerf) is always to your side.
- Support the workpiece near the cut.
- Clamp the workpiece securely so that the workpiece will not move during the cut.
- Always place the saw on the workpiece that is supported, not the “cut off” piece.
- Place the workpiece with the “good” side down.
- Draw a guideline along the desired line of cut before beginning your cut.
- Keep the cord away from the cutting area. Always place the cord to prevent it from hanging up on the workpiece while making a cut.



RIGHT

Fig. 14



WRONG

Fig. 15

OPERATION

CROSS CUTTING/RIP CUTTING

See Figures 16 - 17.

When making a cross cut or rip cut, align your line of cut with the outer blade guide notch on the saw base.

Since blade thicknesses vary, always make a trial cut in scrap material along a guideline to determine how much, if any, the guideline must be offset to produce an accurate cut.

NOTE: The distance from the line of cut to the guideline is the amount you should offset the guide.

- Secure the workpiece.
- Clamp a straight edge to the workpiece using C-clamps.
- Saw along the straight edge to achieve a straight rip cut.

  NOTE: Do not bind the blade in the cut.

USING THE EDGE GUIDE

See Figure 18.

Use an edge guide when making long or wide rip cuts with the saw.

- Remove the battery pack from the saw.
- Place the edge guide through the holes in the saw base
- Adjust the edge guide to the width needed.
- Tighten the wing screw securely.

When using an edge guide, position the face of the edge guide firmly against the edge of workpiece. This makes for a true cut without pinching the blade. The guiding edge of the workpiece must be straight for your cut to be straight. Use caution to prevent the blade from binding in the cut.

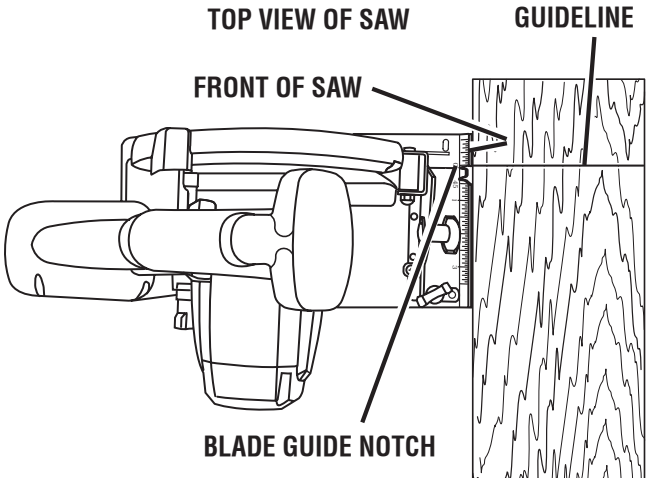


Fig. 16

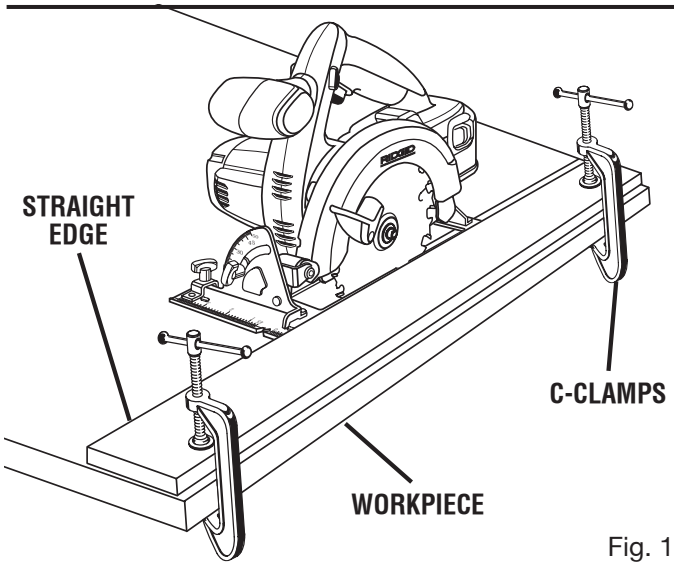


Fig. 17

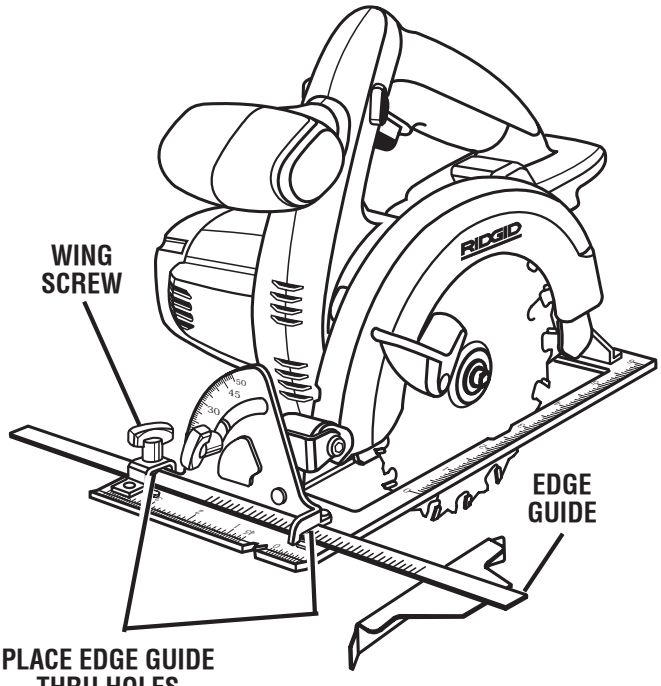


Fig. 18

OPERATION

WIDTH OF CUT SCALE

See Figure 19.

A width of cut scale has been provided on the base of the saw. When making straight cross cuts or rip cuts, the scale can be used to measure up to four inches to the right side of the blade. It can be used to measure up to one inch to the left side of the blade.

BEVEL CUTTING

See Figures 20 - 21.

The angle of cut of the saw may be adjusted to any desired setting between zero and 50°.

NOTE: When making cuts at 50°, the blade should be set at full depth of cut.

When making 45° bevel cuts, there is a notch in the saw base to help you line up the blade with the line of cut.

Align your line of cut with the inner blade guide notch on the saw base when making 45° bevel cuts.

Since blade thicknesses vary and different angles require different settings, always make a trial cut in scrap material along a guideline to determine how much you should offset the guideline on the board to be cut.

When making a bevel cut, hold the saw firmly with both hands.

Rest the front edge of the base on the workpiece. Depress the lock-off button and squeeze the switch trigger to start the saw. Always let the blade reach full speed, then guide the saw into the workpiece.

WARNING:
The blade coming in contact with the workpiece before it reaches full speed could cause saw to "kickback" toward you resulting in serious injury.

After you complete your cut release the trigger and allow the blade to come to a complete stop. After the blade has stopped, lift the saw from the workpiece.

TO ADJUST BEVEL SETTING

See Figure 21.

- Remove the battery pack from the saw.
- Loosen the bevel adjustment knob.
- Raise the motor housing end of saw until you reach desired angle setting on bevel scale.
- Tighten the bevel adjustment knob securely.

WARNING:
Attempting bevel cut without knob securely tightened can result in serious injury.

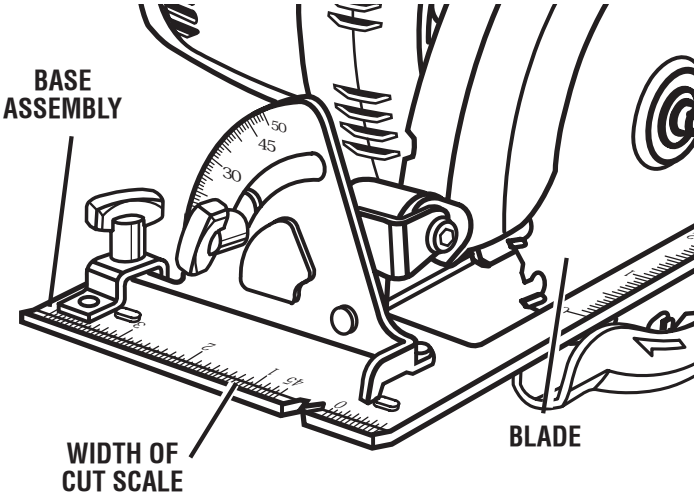


Fig. 19

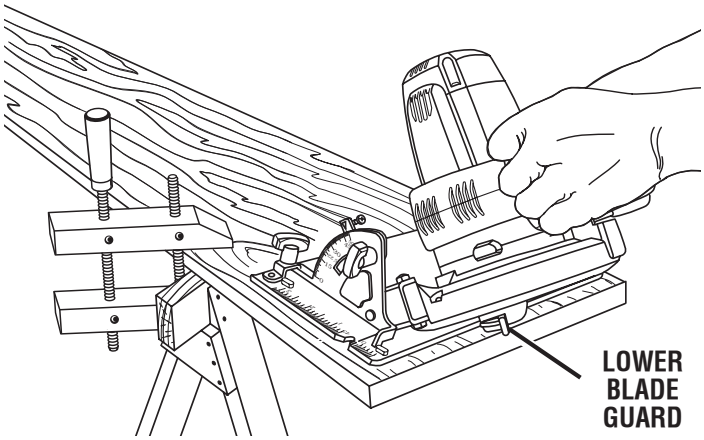


Fig. 20

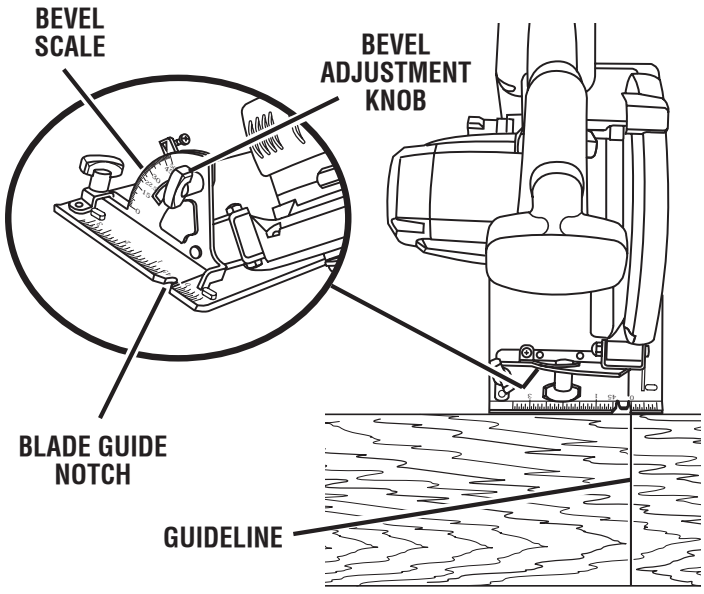


Fig. 21

OPERATION

POSITIVE 0° BEVEL STOP

See Figure 22.

The saw has a positive 0° bevel stop that has been factory adjusted to assure 0° angle of the saw blade when making 90° cuts.

TO CHECK

- Remove battery pack from saw.

WARNING:
Failure to remove battery pack from saw could result in accidental starting, causing possible serious personal injury.

- Place the saw in an upside down position on work-bench.
- Using a carpenter's square, check squareness of saw blade to the base of the saw.

TO ADJUST

- Remove battery pack from saw.
- Loosen bevel adjustment knob.
- Loosen hex nut securing adjustment screw.
- Turn screw and adjust base until square with saw blade.
- Tighten hex nut and bevel adjustment knob securely.

WARNING:
Attempting to make cuts without bevel adjustment knob securely tightened can result in serious injury.

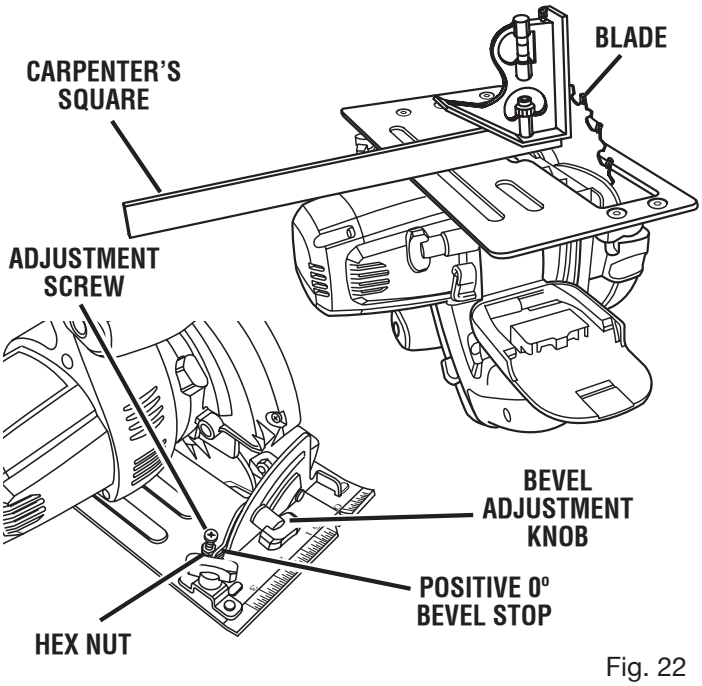


Fig. 22

OPERATION

POCKET CUTTING

See Figure 23.

WARNING:
Always adjust bevel setting to zero before making a pocket cut. Attempting a pocket cut at any other setting can result in loss of control of the saw, possibly causing serious injury.

Adjust the bevel setting to zero, set the blade to the correct blade depth setting, and swing the lower blade guard up using the lower blade guard handle.

Always raise the lower blade guard with the handle to avoid serious injury.

While holding the lower blade guard by the handle, firmly rest the front of the base flat against the workpiece with the rear of the handle raised so the blade does not touch the workpiece.

Depress the lock-off button and squeeze the switch trigger to start the saw. Always let the blade reach full speed then slowly lower blade into the workpiece until base is flat against workpiece.

After you complete your cut release the trigger and allow the blade to come to a complete stop. After the blade has stopped, remove it from the workpiece. Corners may then be cleared out with a hand saw or sabre saw.

WARNING:
Never tie the lower blade guard in a raised position. Leaving the blade exposed could lead to serious injury.

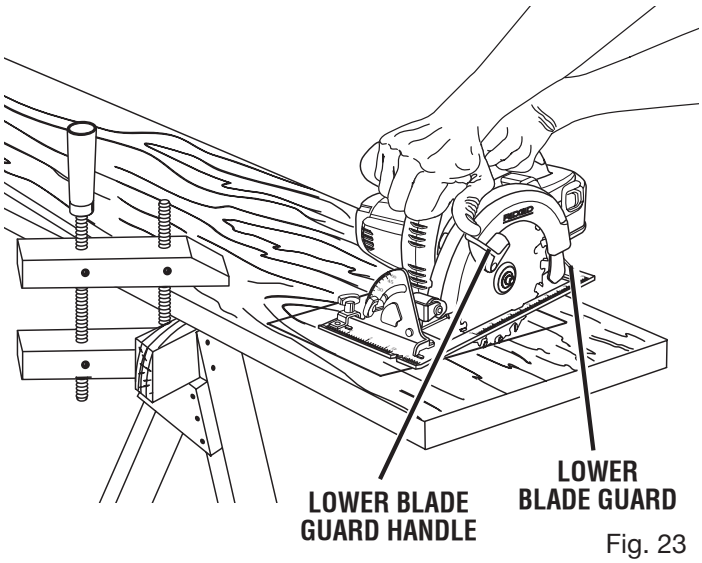


Fig. 23

MAINTENANCE

WARNING:
When servicing use only identical RIDGID replacement parts. Use of any other parts may create a hazard or cause product damage.

WARNING:
Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

WARNING:
To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

WARNING:
Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

Only the parts shown on the parts list are intended to be repaired or replaced by the customer. All other parts should be replaced at a RIDGID authorized service center.

BATTERIES

The battery pack for this tool is equipped with nickel-cadmium rechargeable batteries. Length of service from each charging will depend on the type of work you are doing.

The batteries in this tool have been designed to provide maximum trouble-free life. However, like all batteries, they will eventually wear out. **Do not** disassemble battery pack and attempt to replace the batteries. Handling of these batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, we suggest the following:

- Remove the battery pack from the charger once it is fully charged and ready for use.

For battery pack storage longer than 30 days:

- Store the battery pack where the temperature is below 80°F.
- Store battery packs in a ‘discharged’ condition.

BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING

To preserve natural resources, please recycle or dispose of batteries properly.

This product contains nickel-cadmium batteries. Local, state or federal laws may prohibit disposal of nickel-cadmium batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options.

WARNING:
Upon removal, cover the battery pack’s terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble battery pack or remove any of its components. Nickel-cadmium batteries must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

WARRANTY

RIDGID® HAND HELD AND STATIONARY POWER TOOL 3 YEAR LIMITED SERVICE WARRANTY

Proof of purchase must be presented when requesting warranty service.

Limited to RIDGID® hand held and stationary power tools purchased 2/1/04 and after. This product is manufactured by One World Technologies, Inc. The trademark is licensed from RIDGID, Inc. All warranty communications should be directed to One World Technologies, Inc., attn: RIDGID Hand Held and Stationary Power Tool Technical Service at (toll free) 1-866-539-1710.

90-DAY SATISFACTION GUARANTEE POLICY

During the first 90 days after the date of purchase, if you are dissatisfied with the performance of this RIDGID® Hand Held and Stationary Power Tool for any reason you may return the tool to the dealer from which it was purchased for a full refund or exchange. To receive a replacement tool you must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the 3 YEAR service warranty period.

WHAT IS COVERED UNDER THE 3 YEAR LIMITED SERVICE WARRANTY

This warranty on RIDGID® Hand Held and Stationary Power Tools covers all defects in workmanship or materials and normal wear items such as brushes, chucks, motors, switches, cords, gears and even cordless batteries in this RIDGID® tool for three years following the purchase date of the tool. Warranties for other RIDGID® products may vary.

HOW TO OBTAIN SERVICE

To obtain service for this RIDGID® tool you must return it; freight prepaid, or take it in to an authorized service center for RIDGID® branded hand held and stationary power tools. You may obtain the location of the authorized service center nearest you by calling (toll free) 1-866-539-1710 or by logging on to the RIDGID® website at www.ridgid.com. When requesting warranty service, you must present the original dated sales receipt. The authorized service center will repair any faulty workmanship, and either repair or replace any part covered under the warranty, at our option, at no charge to you.

WHAT IS NOT COVERED

This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than an authorized service center for RIDGID® branded hand held and stationary power tools. Consumable accessories provided with the tool such as, but not limited to, blades, bits and sand paper are not covered.

RIDGID, INC. AND ONE WORLD TECHNOLOGIES, INC. MAKE NO WARRANTIES, REPRESENTATIONS OR PROMISES AS TO THE QUALITY OR PERFORMANCE OF ITS POWER TOOLS OTHER THAN THOSE SPECIFICALLY STATED IN THIS WARRANTY.

ADDITIONAL LIMITATIONS

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to three years from the date of purchase. One World Technologies, Inc. and RIDGID, Inc. are not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

One World Technologies, Inc.
Hwy. 8
Pickens, SC 29671

OPERATOR'S MANUAL

6-1/2 IN. 18 VOLT CIRCULAR SAW

R845

Customer Service Information:

For parts or service, contact your nearest RIDGID authorized service center. Be sure to provide all relevant information when you call or visit. For the location of the authorized service center nearest you, please call 1-866-539-1710 or visit us online at www.ridgid.com.

The model number of this tool is found on a plate attached to the motor housing. Please record the serial number in the space provided below. When ordering repair parts, always give the following information:

Model No. R845

Serial No. _____

983000-313
5-05